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September 14, 2026

In the Matter of
Holtec Decommissioning
International, LLC

OADR Docket No. 2024-025
MassDEP File No. MA0003557
Plymouth, MA

FINAL DECISION

I adopt the Recommended Final Decision (“RFD”) as my final decision in this matter, except as to certain aspects of the analysis in Section IV, part 2, regarding field preemption. I adopt the conclusion in that section that the Massachusetts Ocean Sanctuaries Act (“OSA”) is not field preempted by the federal Atomic Energy Act (“AEA”), and therefore affirm the Final Determination issued by the Massachusetts Department of Environmental Protection (“MassDEP”) to Holtec Decommissioning International, LLC (“Holtec”). For the reasons explained below, I conclude that the OSA is not preempted primarily for different reasons than the Presiding Officer.

BACKGROUND

In the RFD, the Presiding Officer relies on the United States Supreme Court decision in English v. General Electric Co., 496 U.S. 72 (1990), to analyze whether the OSA, and MassDEP’s Final Determination made pursuant thereto, are field preempted by the AEA.

RFD at 49-50. As explained in the RFD, in English the Supreme Court held that a state law not motivated by nuclear safety concerns may nonetheless be preempted by the AEA if it has a “direct and substantial effect on the decisions made by those who build or operate nuclear facilities concerning radiological safety levels.” English, 496 U.S. at 85.

The Presiding Officer notes that in applying that test, the Court in English examined the effect of state law on the resource allocation decisions made at nuclear facilities rather than the state law’s impact on actual radiological safety policies. RFD at 48, citing 496 U.S. at 85. The Presiding Officer ultimately paraphrases the English test as follows: “first, if a state law has nuclear safety concerns as its motivation, it is preempted. Second, if a state law has some direct and substantial effect on the resource allocation decisions made by those who build or operate nuclear facilities, it is preempted.” RFD at 48-49.

In the Presiding Officer’s view, impacts to resource allocation decisions are discerned by comparing the costs to the nuclear facility operator of complying with the state law versus ignoring it. RFD at 49-50. He notes that “Costs are the most important factor in determining direct and substantial effect.” RFD at 53. He finds that since Holtec failed to present sufficient evidence to conduct a cost comparison, Holtec failed to demonstrate that the OSA had a direct and substantial effect on its decisions concerning radiological safety levels. RFD at 50 (“Holtec has the burden of proof in this proceeding, and that means it must show by a preponderance of the evidence that the OSA and the Final Determination will have a substantial effect on its resource allocation decisions. Without any evidence of the cost of the alternative disposal options, Holtec’s bald assertions that they will be more expensive are not sufficient to satisfy this burden.”).

In briefing, Holtec also highlighted “resource allocation decisions” as the focal point of the English test. Holtec Post-Hearing Memo at 90; Holtec Pre-Hearing Memo at 38, 49. But, as the Presiding Officer notes in the RFD, Holtec argues that a “precise determination of costs” is not required to assess a state law’s impact on resource allocation decisions, and that Holtec need not show with any certainty how the OSA would alter its decision-making. RFD at 50; Holtec Post-Hearing Memo at 88. Holtec’s position is essentially that any effect on the disposal methods available to it, even where other methods are readily available and approved by the Nuclear Regulatory Commission (“NRC”), is a direct and substantial effect on its resource allocation decisions concerning radiological safety levels and thus sufficient to find preemption. Holtec Pre-Hearing Memo at 49.

DISCUSSION

The field preemption analysis in this matter should focus more squarely on the Supreme Court’s most recent AEA preemption decision, Virginia Uranium, Inc. v. Warren, 587 U.S. 761 (2019). That case demonstrates that federal preemption does not turn on detailed cost comparisons, and indeed moves away from English more broadly. To the extent the two-pronged English analysis is still applicable—which is doubtful following Virginia Uranium—there is sufficient evidence in the record demonstrating the OSA has neither a direct nor substantial effect on Holtec’s radiological safety decision-making.

A. The OSA is not preempted applying the Supreme Court’s rationale in Virginia Uranium.

In Virginia Uranium, the Supreme Court considered a mining company’s claim that a statewide prohibition on uranium mining was preempted by the AEA. The Supreme Court’s field preemption analysis involved a close examination of 42 U.S.C. § 2021 (“Section

2021”). Virginia Uranium, 587 U.S. at 769-773, 786-789. Section 2021 was added to the AEA in 1959 (five years after the law’s passage) and allows the NRC to devolve certain of its previously exclusive authority to states by agreement. Id. at 769. In adding that section, Congress reserved for the NRC exclusive jurisdiction over particular activities. 42 U.S.C. § 2021(c). Those “core,” see Virginia Uranium, 587 U.S. at 772, activities are:

- (1) the construction and operation of any production or utilization facility or any uranium enrichment facility;
- (2) the export from or import into the United States of byproduct, source, or special nuclear material, or of any production or utilization facility;
- (3) the disposal into the ocean or sea of byproduct, source, or special nuclear waste materials as defined in regulations or orders of the [NRC];
- (4) the disposal of such other byproduct, source, or special nuclear material as the NRC determines by regulation or order should, because of the hazards or potential hazards thereof, not be so disposed of without a license from the NRC.

42 U.S.C. § 2021(c)(1)-(4). The statute then provides, however, that “[n]othing in this section shall be construed to affect the authority of any State or local agency to regulate activities *for purposes other than* protection against radiation hazards.” Id. at § 2021(k) (emphasis added).

The Court emphasizes that while Section 2021(c) identifies four “core” areas that the NRC may not devolve to states, states have *always* had, and continue to have, the authority to regulate those core activities for purposes other than radiation protection. Virginia Uranium, 587 U.S. at 770 (plurality op.) (Section 2021(k) “clarifies that nothing in this new section 2021—a section allowing for the devolution-by-agreement of federal regulatory authority—should be construed to curtail the States’ ability to regulate the activities discussed in that *same section* for purposes other than protecting against radiation hazards” (internal quotations and brackets omitted) (emphasis in original)); id. at

787 (Ginsburg, J., concurring) (“§ 2021(k) is most sensibly read to clarify that the door newly opened for state regulation left in place *pre-existing state authority* to regulate activities for purposes other than protection against radiation hazards” (internal quotations omitted) (emphasis added)). In fact, the Court observes that the point of Section 2021(k) appears to be to prevent courts from reading the rest of the section, including Section 2021(c), as “prohibiting States from regulating any activity even tangentially related to nuclear power without first reaching an agreement with the NRC.” *Id.* at 769 (plurality op.).

Further examining the interplay between Section 2021(c) and Section 2021(k), the Court held that “only state laws that seek to regulate the activities discussed in § 2021 without an NRC agreement —activities like the construction of nuclear power plants—may be scrutinized to ensure their purposes aim at something other than regulating nuclear safety.” *Id.* at 770. In other words, if a state law “comes close to trenching on core federal powers reserved to the federal government,” *id.* at 773, only then is it appropriate to inquire whether the state law was enacted “for purposes other than protection against radiation hazards.” *Id.* at 773, 789. If the state law does trench on a core activity, it still is not preempted if the state law “regulate[s] the activities discussed in § 2021 for purposes *other than* nuclear safety.” *Id.* at 769 (plurality op.); *see also id.* at 789 (Ginsburg, concurring). “Indeed,” the Court continued, “if anything, subsection (k) might be described as a *non-preemption* clause.” *Id.* at 769 (plurality op.); *see also id.* at 789 (Ginsburg, concurring) (“To the degree the AEA preempts state laws enacted for certain purposes, § 2021(k) stakes out the boundaries of the preempted field, *i.e.*, state laws that apply to federally licensed

activities and are driven by concerns about the radiological safety of those activities. We have no license to expand those boundaries.”).

Notably, neither Justice Gorsuch’s plurality opinion (for three justices) nor Justice Ginsburg’s concurrence (for three justices) even mention the “direct and substantial effect” test from English. The absence of any mention of that test in either of those opinions does not appear to have been an oversight. The English test featured heavily, for example, in the United States’ amicus brief in support of the petitioner, Virginia Uranium. *E.g.*, Br. of United States as Amicus Curiae at 21, Virginia Uranium v. Warren, No. 16-1275 (July 26, 2018) (“The Court in *English* further defined the preempted field to include state regulations that are ‘enacted out of nonsafety concerns’ but have a sufficiently ‘direct and substantial effect on . . . decisions ‘concerning radiological safety levels.’”) (quotations omitted)¹; see also *id.* at 21, 21 n.6, 26, 31. And Chief Justice Roberts relied on that test in his dissent (for three justices), framing the question as “whether, consistent with the AEA and [the Court’s] precedents, . . . [Virginia] may purport to regulate a non-preempted field . . . with the purpose and effect of indirectly regulating a preempted field,” *id.* at 795, and concluding that answering that question should have been easy, *id.*, because Virginia had “not put forward a ‘nonsafety rationale,’” *id.* at 797. But the Chief Justice then acknowledged that both the “lead opinion and the concurrence . . . shrink from [the Court’s AEA] precedents, particularly Pacific Gas [& Electric Co. v. State Energy Resources Conservation & Dev. Comm’n, 461 U.S. 190 (1983)]” *id.* at 796, upon which the substantial effects test of English was based.

The lead opinion for the Court instead hewed closely to the “text and structure” of the AEA, 587 U.S. at 768, and made clear that Section 2021(c), as limited by Section 2021(k), marks the field of exclusive federal preemption. See Virginia Uranium, 587 U.S. at 768-69, 772. Again, “[Section] 2021(k) stakes out the boundaries of the preempted field, *i.e.*, state laws that apply to federally licensed activities and are driven by concerns about the radiological safety of those activities. [Courts] have no license to expand those boundaries.” Id. at 789 (Ginsburg, J., concurring). In sum, Virginia Uranium shifts away from the “direct and substantial effect” test of English, which was to be applied regardless of the motivation behind the state law, to a test that asks if the state law encroaches on a “core” federal activity and, if so, whether the state law is regulating the activity for a purpose other than protection against radiation hazards. If the state law regulates for a non-radiological purpose, then it is not field preempted. See Virginia Uranium, 587 U.S. at 770, 787.

The OSA is not field preempted by the AEA because the OSA’s purpose has nothing to do with radiation hazards or radiological safety. Even assuming, *arguendo*, that the OSA, and, therefore, the Final Determination based on the OSA, encroach upon the “core” activity of disposal into the ocean of byproduct, source, or special nuclear waste materials, 42 U.S.C. § 2021(c)(3),^{2,3} such that the purpose of the OSA and the Final Determination may be scrutinized to ensure they were intended to regulate “for purposes other than protection against radiation hazards,” see 42 U.S.C. § 2021(k); Virginia Uranium, 587 U.S. at 770, 789, any scrutiny of the OSA quickly reveals that it was indeed enacted for purposes other than protection against radiation hazards—and therefore is not preempted by the AEA. The Final Determination further illustrates the non-radiological purpose of the statute, as it denied

Holtec's request to discharge a new source of *non*-radiological pollutants into Cape Cod Bay, which the OSA prohibits. See RFD at 16-17.

As the RFD explains, the OSA clearly has a purpose other than protection against radiation hazards. RFD at 20, 49. The OSA was enacted more than fifty years ago to protect designated ocean sanctuaries “from any exploitation, development, or activity that would significantly alter or otherwise endanger the ecology or the appearance of the ocean, the seabed, or subsoil thereof, or the Cape Cod National Seashore.” G.L. c. 132A, § 14. One way the OSA protects the ecology and appearance of the ocean is by its generally applicable prohibition against the discharge of commercial, municipal, domestic or industrial wastes into designated ocean sanctuaries. Id. § 15(4). This source-neutral prohibition does not seek to regulate or target radiological safety in any way. To find the OSA field preempted by the AEA, one would have to ignore the majority of justices in Virginia Uranium and read 42 U.S.C. § 2021(k) entirely out of the statute. I decline to do so. Instead, as I have done herein, I must ground my analysis and decision on the rationale expressed in the leading and concurring opinions in Virginia Uranium.

B. The OSA is not preempted even if applying the test from English.

Despite Virginia Uranium's significant departure from the two-prong test in English, some out-of-circuit courts believe the “direct and substantial effect” test survived Virginia Uranium, even if it means ignoring Section 2021(k).⁴ For the reasons described above, I disagree with that conclusion. Nonetheless, as explained below, I also conclude that the OSA is not preempted even if the English test remains valid.

Applying the English test in the present case, it is clear that the OSA does not have nuclear safety concerns as its motivation. Supra, at 6-7. Nor does it have a sufficiently direct or substantial effect on the decisions made by those who build or operate nuclear facilities concerning radiological safety levels. In its permit application, Holtec stated that it has three options for removing the wastewater at issue from PNPS: discharge the wastewater into Cape Cod Bay, evaporate the wastewater, or transport the wastewater to an off-site disposal facility. RFD at 15. Significantly, Holtec acknowledged, and the NRC confirmed, that each of those options would comply with the NRC's regulations. RFD at 15, 55. The NRC has determined that each one of those options is safe as they relate to radiological safety levels. Indeed, the company decommissioning Vermont Yankee Nuclear Power Station chose to ship its wastewater to an off-site disposal facility even though it also had the option of seeking to discharge the wastewater into a waterbody. Lampert PFT at 23-34 ¶ 129. The primary difference between the three options is cost, not radiological safety. According to Holtec, evaporating the wastewater or transporting it to an off-site disposal facility are both more expensive than discharging the wastewater into Cape Cod Bay. RFD at 15. If I were to find that the OSA is preempted on this record, I would, in effect, place the power to determine when federal law preempts state law in the hands of a private company and its economic considerations. But preemption does not (and cannot) turn on such private financial concerns where Congress has not made that concern relevant.⁵ Instead, under English, I must ask whether the OSA has some "direct and substantial effect" on "radiological safety levels." 496 U.S. at 85; see also id. at 84 ("state

regulation . . . directly affecting radiological safety of nuclear-plant[s].”). Because the OSA does not have such effect, I find that it is not preempted.

Of course, the Final Determination may affect Holtec’s bottom line and will affect its decision-making, just as the prospect of paying tort damages to employees “undoubtedly” affects nuclear facility operators in some way. See English, 496 U.S. at 86. But the decisions affected by the Final Determination concern where to dispose of wastewater, not whether it is safe to do so from a radiological safety perspective. In other words, the Final Determination does not affect decisions about “radiological safety levels” or other nuclear safety issues—the concerns that the AEA reserves for federal jurisdiction. Indeed, the Final Determination is a proper exercise of state authority over land use, an area of traditional state jurisdiction even in the context of the AEA. Pacific Gas, 461 U.S. at 212. Given that, Holtec cannot overcome “the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.” Id. at 206. That was Holtec’s burden, and it has failed to satisfy it. See Conti v. Citizens Bank, N.A., 157 F.4th 10, 16 (1st Cir. 2025) (“burden of proving preemption lies with part[y] asserting it” (citation omitted)).

The OSA’s generally applicable prohibition against industrial discharges to ocean sanctuaries distinguishes it from cases where a direct and substantial effect has been found. Cf. United States v. Manning, 527 F.3d 828, 837-839 (9th Cir. 2008) (finding a Washington state law directly and substantially affected the U.S. Department of Energy’s decisions on nationwide nuclear waste management, where it was “abundantly clear from the text” of the state statute that it intended to regulate radioactive substances). Indeed,

the OSA does not attempt to target radiological safety through traditional state authorities or seek to regulate specific nuclear facilities in any way. See, e.g., Skull Valley Band of Goshute Indians v. Nielson, 376 F.3d 1223, 1246-1247 (10th Cir. 2004) (finding preempted state laws banning the provision of municipal services specifically to a nuclear facility, and distinguishing those state laws from the “generally applicable” state tort laws that were *not* preempted in English and Silkwood v. Kerr-McGee Corp., 464 U. S. 238); Holtec Int’l v. New York, 801 F. Supp. 3d 235 (S.D.N.Y. 2025), *appeal pending* No. 25-2657 (2d Cir.) (finding that a state law expressly prohibiting the “discharge [of] any radiological substance into the Hudson River in connection with the decommissioning of a nuclear power plant” is preempted).

To the extent the English test is still applicable, the OSA and Final Determination simply do not have a sufficiently direct and substantial effect on Holtec’s decisions about radiological safety levels to be preempted.

CONCLUSION

The analysis in this Final Decision replaces Section IV, part 2 of the RFD, but I otherwise adopt the RFD as the Final Decision in this matter. I therefore affirm MassDEP’s Final Determination.

The parties to this proceeding are notified of their right to file a motion for reconsideration of this decision, pursuant to 310 CMR 1.01(14)(d). Any such motion must be filed with the Case Administrator and served on all parties within seven business days of the postmark date of this decision. A person who has the right to seek judicial review may

appeal this decision to the Superior Court pursuant to M.G.L. c. 30A, §14(1). Any such appeal must be filed with the Court within thirty days of receipt of this decision.

A handwritten signature in blue ink, appearing to read "Bonnie Heiple", is written above a horizontal line.

Bonnie Heiple
Commissioner

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